

**Math 165: Honors Calculus I**  
**Quiz 3** Sept. 17, 1998

Name: \_\_\_\_\_

1. Define the following:

a) A step function  $s$  on  $[a, b]$ .

b)  $\int_a^b s(x) dx$  where  $s$  is a step function on  $[a, b]$ .

c)  $\int_a^b f(x) dx$  where  $f$  is a bounded function on  $[a, b]$ .

2. State and prove the Linearity Property for integrals of step functions.